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EXAMINER

STEPHENS, JACQUELINE F

ART UNIT PAPER NUMBER

3761

DATE MAILED: 08/12/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/666,213

Applicant(s)

DOPPS ET AL.

Examin r

Jacqueline F Stephens

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-35, 38 and 41-55 is/are pending in the application.
- 4a) Of the above claim(s) 49-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-35, 38 and 41-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-3, 5, 11, 12, 16-18, 38, 41, and, 45-47 as being anticipated by Kenmochi have been considered but are moot in view of the new ground(s) of rejection. Claims 49-55 are withdrawn.

Applicant's arguments regarding the rejection of claims 1, 4-9, 11-13, 20, 24-35, 38, 41, and 45-47, under 35 U.S.C. 102(b) as being anticipated by Ahr USPN 5733273 have been fully considered but they are not persuasive. Applicant argues Ahr does not teach fibrous bands substantially free of superabsorbent material. However, Ahr teaches the amount of superabsorbent in the fibrous bands can vary, and the fibrous bands near the body facing surface can have 0-50% by weight of superabsorbent (col. 7, line 64 through col. 8, line 1). At 0% the aforementioned fibrous bands are free of superabsorbent material.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3761

3. Claims 1, 4-9, 11-13, 20, 24-35, 38, 41, and 45-47, as best understood by the examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Ahr USPN 5733273.

As to claims 1, 38, 41, and 45-47, Ahr discloses an absorbent article, such as a feminine care product or diaper (Abstract), comprising:

a liquid pervious facing sheet,
a storage layer (10, 310, 410, 510, Figures 1-5) comprising an absorbent composite comprising one or more fibrous bands (12, 312, 412(A-D), 512) in a fibrous base (14, 314, 414, 514). The base comprises a fibrous matrix and superabsorbent material (col. 4, lines 18-34). The bands are substantially free of superabsorbent material (col. 7, line 64 through col. 8, line 1) and a liquid impervious backing sheet joined to the topsheet (Figure 1, col. 8, lines 40-43).

As to claim 4, the fibrous bands of Ahr are discontinuous along the composites length in the machine direction (Figures 1-5).

As to claims 5-9, 11, and 12, the fibrous matrix comprises fibers selected from the group of claimed materials (col. 4, lines 18-34). Ahr incorporates by reference Herron USPN 5183707 (Abstract and col. 4, lines 63-66), which discloses crosslinked cellulose fibers for use in the matrix fibers.

As to claim 20, the composite comprises a wet strength agent (col. 4, lines 34-41).

As to claims 24 and 25, Ahr discloses the density and basis weights within the claimed ranges (col. 2, lines 51 through col. 3, line 3).

Art Unit: 3761

As to claims 26-33, Ahr discloses the fibrous bands comprise fibers selected from the group of claimed materials (col. 4, lines 34-64 and Herron '707 col. 4, lines 35-66).

As to claims 13, 34 and 35, Ahr discloses the absorbent strips can comprise up to 50% of the total weight of the composite (col. 9, lines 58-60), less the amount of superabsorbent in the strips (33%, col. 5, lines 13-16), the fibrous material (matrix or resilient) in the absorbent strips can comprise up to 16.5% of the total weight of the composite, and 50% or more of the base.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 3761

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr. Ahr does not specifically disclose the superabsorbent material absorbs from about 5 to about 100 times its weight in 0.9 percent saline solution. However, it is old and well known in the art that superabsorbent materials absorb up to and more than 100 times their weight in saline solution.

7. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahr in view of Chan EP 0515750.

As to claim 21, Ahr discloses the present invention substantially as claimed. However, Ahr does not disclose the wet strength agent is selected from polyamide-epichlorohydrin or polyacrylamide resins. Chan discloses a polyamide-epichlorohydrin wet strength resin for use in providing paper with resistance to rupture or disintegration. Chan discloses the polyamide-epichlorohydrin wet strength resin comprises reduced amount of organic-chlorine contaminants yet retains its wet strength properties. Additionally Chan discloses the polyamide-epichlorohydrin wet strength resin does not increase the stiffness of the absorbent medium or reduce its water absorbency as compared to other types of resins (page 2, lines 1-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the wet strength resin of Ahr with the polyamide-epichlorohydrin wet strength resin for the benefits disclosed in Chan.

Art Unit: 3761

As to claim 22, Ahr/Chan disclose the wet strength resin can be added to an absorbent medium in an amount of 0.1-2% by weight of the absorbent medium ('750 page 6, lines 49-58).

As to claim 23, Ahr/Chan does not specifically discloses a wet strength agent present in the composite in about 0.25% by weight of the total composite. However, Chan recognizes the percentage can be varied and this will affect the wet strength of the absorbent medium. Chan, therefore recognizes the wet strength is a result effective variable of percentage of wet strength agent added to the absorbent medium. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of Ahr/Chan with the claimed 0.25% add-on of wet strength agent, since discovering an optimum value of a result effective variable involves only routine skill in the art.

8. Claims 1-3, 5, 6, 9-14, 16-18, 26, 27, 38, 41, and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fendler et al. USPN 4372312 in view of Kenmochi USPN 5613962.

As to claims 1, 38, 41, 45, and 47, Fendler discloses the present invention substantially as claimed. However, Fendler does not disclose the base comprises superabsorbent material. Kenmochi discloses the absorbent material comprises superabsorbent (col. 2, lines 53-55). It would have been obvious to one having ordinary

Art Unit: 3761

skill in the art to modify the base of Fendler to incorporate superabsorbent for the benefit of increasing the absorbency of the base material.

Fendler/Kenmochi discloses an absorbent article, such as a feminine care product ('312 Figures 1-5) or a diaper ('962 col. 1, lines 1-3) comprising:

a liquid pervious facing sheet 16,

a storage layer 10/12 comprising an absorbent composite comprising one or more fibrous bands 13 in a fibrous base 12 (Figure 2). The base comprises a fibrous matrix and absorbent material (col. 3, line 32 through col. 4, line 2). The bands are substantially free of absorbent material ('312 col. 2, lines 1-6). The article further comprises a liquid impervious backing sheet 14.

As to claims 2 and 3, see '312 Figure 6.

As to claims 5, 6, 9, 11, and 12, the fibrous matrix comprises fibers selected from the group of claimed materials ('312 col. 3, line 32 through col. 4, line 2).

As to claim 10, Fendler/Kenmochi incorporates by reference polyethylene terephthalate fibers are suitable for thermoplastic fibers used in forming the melt-blown microfibers of the coform layers (Fendler col. 3, lines 34-38 incorporates by reference Anderson et al. USPN 4100324, which discloses at col. 7, lines 59-66 the claimed materials).

As to claims 13 and 14, Fendler discloses the resilient fibers and matrix fibers are present in the base in the claimed amount (col. 3, line 67 through col. 4, line 1).

As to claims 16-18, Fendler/Kenmochi discloses the absorbent material is a superabsorbent particle present in an amount of about 5-40%, which includes the claimed ranges ('962 col. 3, lines 4-10).

As to claims 26, and 27, Fendler/Kenmochi discloses the fibrous bands comprise fibers selected from the group of claimed materials ('962 col. 2, lines 4-6).

As to claim 46, Fendler/Kenmochi discloses the backsheet is joined to the topsheet ('962 Figures 4 and 5).

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fendler/Kenmochi in view of Bernardin USPN 3525338. Fendler/Kenmochi discloses the present invention substantially as claimed. However, Fendler/Kenmochi does not disclose the fibrous band comprises chemically stiffened fibers. Bernardin discloses the fibrous band comprises chemically stiffened fibers for the purpose of providing superior wicking ability for fluids (col. 3, lines 11-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the fibrous insert of Fendler/Kenmochi with chemically stiffened fibers for the benefits disclosed in Bernardin.

10. Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fendler/Kenmochi in view of DiPalma et al USPN 5649916.

As to claim 42, Fendler/Kenmochi discloses the present invention substantially as claimed. However, Fendler/Kenmochi fails to disclose the absorbent article

Art Unit: 3761

comprises an acquisition layer. DiPalma discloses an absorbent article comprising an acquisition layer 18 for the benefit of acquiring and rapidly transferring liquid in the z-direction (towards the core) ('916 col. 4, lines 44-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Fendler/Kenmochi to include an acquisition layer for the benefits disclosed in DiPalma.

As to claims 43 and 44, Fendler/Kenmochi discloses the present invention substantially as claimed. However, Fendler/Kenmochi fails to disclose the absorbent article comprises an intermediate layer interposed between the acquisition layer and the storage layer. DiPalma discloses an absorbent article comprising an intermediate layer 20 interposed between the acquisition layer 18 and the storage layer 24 for the benefit of rapidly wicking fluids and providing increased resiliency ('916 col. 5, line 59 through col. 6, line 26). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Fendler /Kenmochi to include an intermediate layer interposed between the acquisition layer and the storage layer for the benefits disclosed in DiPalma.

11. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fendler/Kenmochi in view of Karami USPN 457989. Fendler/Kenmochi discloses the present invention substantially as claimed. However, Fendler/Kenmochi fails to disclose the absorbent article comprises leg gathers. Karami discloses an absorbent article comprising leg gathers. It would have been obvious to one having ordinary skill in the

Art Unit: 3761

art at the time the invention was made to modify the invention of Fendler/Kenmochi to include leg gathers. Doing so would provide prevention of diaper leakage and discomfort, which Karami teaches is desired (Figure 1 and col. 1, lines 45-68).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F Stephens whose telephone number is (703) 308-8320. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703)308-1957. The fax phone numbers for

Art Unit: 3761

the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Jacqueline F Stephens
Examiner
Art Unit 3761



August 2, 2003



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